AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Claims 1, 2, 7 and 8 are shown as amended and claims 10 and 11 have been added as new claims.

Listing of Claims:

1. (Currently amended): A volume holographic digital data storage system comprising:

a light ~~source~~ generator for generating a laser beam;

a beam splitter for separating the laser beam into a signal beam and a reference beam;

a SLM for modulating the signal beam into binary pixel data on a page-by-page basis based on data inputted from outside;

a reduced reference beam providing means for transmitting a reduced portion of the reference beam as a reduced reference beam; and

a lens having a plurality of incident locations for the reduced reference beam for refracting the reduced reference beam into a storage medium such that the reduced reference beam is projected toward one of the incident locations on the

lens, with the incident locations being spaced apart from each other to yield different refracted angles toward the storage medium with a satisfied angular sensitivity.

~~a beam selecting means for transmitting one of selected portions of the reference beam to thereby provide a reduced reference beam;~~

~~a lens for refracting the reduced reference beam into a storage medium; and~~

~~a reflecting means for reflecting the reduced reference beam received from the beam selecting means toward an incident location on the lens,~~

~~wherein the neighboring incident locations of reference beams on the lens are spaced apart from each other by a certain degree for page separation.~~

2. (Currently amended): The system of claim [[1]] 11, wherein the beam selecting means includes:

an iris having a transmission region for transmitting only the selected portion of the reference beam, thereby providing the reduced reference beam and a non-transmission region for absorbing or reflecting the remainder portion of the reference beam; and

an actuator for moving the iris on a two-dimensional plane to change the incident location.

3. (Original): The system of claim 2, wherein the reflecting means includes:

a first reflection mirror for reflecting the reduced reference beam received from the iris; and

a second reflection mirror for reflecting the reduced reference beam received from the first reflection mirror toward the lens.

4. (Previously presented): The system of claim 3, further comprising another actuator for altering a position of the second reflection mirror.

5. (Previously presented): The system of claim 4, wherein the another actuator moves the second reflection mirror with an incident angle of the reduced reference beam toward the second reflection mirror being unchanged.

6. (Previously presented): The system of claim 3, further comprising another actuator for altering a position of the first reflection mirror.

7. (Currently amended): A control method for a volume holographic digital data storage system of claim [[1]] 11, comprising the steps of:

(a) fixing the beam selecting means at a predetermined position;

(b) recording an interference pattern of the signal beam and the reference beam;

(c) moving the reflecting means while maintaining the position of the beam selecting means;

(d) recording an interference pattern of the signal beam and the reference beam;

(e) repeating the steps (c) to (d) as long as the reference beam has an incident location distinguishable from that of the previously generated reference beams in order to satisfy an angular selectivity;

(f) changing the position of the beam selecting means; and

(g) repeating the steps (b) to (f) as long as the reference beam has an incident location distinguishable from that of the previously generated reference beams in order to satisfy an angular selectivity.

8. (Currently amended): A control method for a volume holographic digital data storage system of claim [[1]] 11, comprising the steps of:

(a) fixing the reflecting means at a predetermined position;

(b) recording an interference pattern of the signal beam and the reference beam;

(c) moving the beam selecting means while maintaining the position of the reflecting means;

(d) recording an interference pattern of the signal beam and the reference beam;

(e) repeating the steps (c) to (d) as long as the reference beam has an incident location distinguishable from that of the previously generated reference beams in order to satisfy an angular selectivity;

(f) changing the position of the reflecting means; and

(g) repeating the steps (b) to (f) as long as the reference beam has an incident location distinguishable from that of the previously generated reference beams in order to satisfy an angular selectivity.

9. (Previously presented): The system of claim 2, wherein the iris has a circular shape and is provided with the transmission region at the center thereof and the annular-shaped non-transmission region therearound.

10. (New): The system of claim 1, wherein the light generator includes:

a light source for emitting a source beam; and

a beam expander for expanding the source beam to provide the laser beam.

11. (New): The system of claim 1, wherein the reduced reference beam providing means includes:

a beam selecting means for selecting the portion of the reference beam to thereby provide the reduced reference beam; and

a reflecting means for reflecting the reduced reference beam received from the beam selecting means toward said one of the incident locations on the lens.